

HISTORIC PROPERTY INVENTORY FORM

IDENTIFICATION SECTION

Field Site No.

118-KW

OAHP No.

Date Recorded

4-Apr-98

Site Name Historic Common

Rod Tip Cave

Field Recorder

Jim Sharpe

Owner's Name

U.S. Department of Energy, Richland Operations Office

Address

P.O. Box 550

City/State/Zip Code

Richland, WA 99352

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
111 21st Avenue Southwest, Post Office Box 48343
Olympia, Washington 98504-8343 (206)753-4011

Status

☒ Survey/Inventory

☐ National Register

☐ State Register

☐ Determined Eligible

☐ Determined Not Eligible

☐ Other (HABS, HAER, NHL)

☐ Local Designation

Photography

Photography Neg. No.

Roll No. 43 Neg. # 10

(Roll No. & Frame No.)

View of

105-KW Rod Tip Cave

Date

6/24/98

Classification

☐ District

☐ Site

☒ Building

☐ Structure

☐ Object

District Status

☒ NR

☐ SR

☐ LR

☐ INV

Contributing

☒

☐

District/Thematic Nomination Name

Hanford Site Manhattan Project and Cold War Historic District

Description Section

Materials & Features/Structural Types

Building Type

Industry

Plan

Structural System

Concrete bunker

No. of Stories

Roof Type

☐ Gable

☐ Flat

☐ Monitor

☐ Gambrel

☐ Shed

☐ Hip

☒ Pyramidal

☐ Other (specify)

Mounded gravel

Cladding (exterior Wall Surfaces)

☐ Log

☐ Horizontal Wood Siding

Rustic/Drop

☐

Clapboard

☐

☐ Wood Shingle

☐ Board and Batten

☐ Vertical Board

☐ Asbestos/Asphalt

☐ Brick

☐ Stone

☐ Stucco

☐ Terra Cotta

☒ Concrete/Concrete Block

☐ Vinyl/Aluminum Siding

☐ Metal (specify)

Other (specify)

Roof Material

☐ Wood Shingle

☐ Wood Shake

☐ Composition

☐ Slate

☐ Tar/Built-up

☐ Tile

☐ Metal (specify)

☒ Other (specify)

Concrete

☐ Not visible

Foundation

☐ Log

☐ Post & Pier

☐ Stone

☐ Brick

☒ Not visible

Concrete

☐ Block

☐ Poured

☐ Other (specify)

Integrity

(Include detailed description in Description of Physical Appearance)

Intact

Slight

Moderate

Extensive

Changes to plan

.....

☒

Changes to windows

.....

☐

Changes to original cladding

.....

☒

Changes to interior

.....

☒

Other (specify)

.....

☐

LOCATION SECTION

Address

Structure 105-KW, 100-K Area

City/Town/County/Zip Code

Richland/Benton County/99352

Twp

14

Range

26

Section

32

I/4 Section

SW

1/4 1/4 Sec

SE

Tax No./Parcel No.

Acreage

Quadrangle or map name

Coyote Rapids, Wash. Quad. 1986

UTM References Zone

11

Easting

301620

Northing

5169380

Plat/Block/Lot

Supplemental Map(s)



High Styles/Forms (Check one or more of the following)

☐ Greek Revival

☐ Gothic Revival

☐ Italianate

☐ Second Empire

☐ Romanesque Revival

☐ Stick Style

☐ Queen Anne

☐ Shingle Style

☐ Colonial Revival

☐ Beaux Arts/Neoclassical

☐ Chicago/Commercial Style

☐ American Foursquare

☐ Mission Revival

☐ Spanish Colonial Revival/Mediterranean

☐ Tudor Revival

☐ Craftsman/Arts & Crafts

☐ Bungalow

☐ Prairie Style

☐ Art Deco/Art Moderne

☐ Rustic Style

☐ International Style

☐ Northwest Style

☐ Commercial Vernacular

☐ Residential Vernacular (see below)

☒ Other (specify)

Industrial Vernacular

Vernacular House Types

☐ Gable Front

☐ Gable Front and Wing

☐ Side Gable

☐ Cross Gable

☐ Pyramidal/Hipped

☐ Other (specify)

NARRATIVE SECTION

Study Unit Themes (check one or more of the following)

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☐ Community Planning/Development

- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Manufacturing/Industry
- ☐ Military

- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science & Engineering
- ☐ Social Movements/Organizations
- ☐ Transportation
- ☒ Other (specify) Manhattan Project and Cold War Era
- ☒ Study Unit Sub Sub-Theme(s) Waste Management (Solid)

Statement of Significance

Date of Construction	<u>1952-1955</u>	Architect/Engineer/Builder	<u>Kaiser Engineers</u>
<input checked="" type="checkbox"/>	In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.		
<input checked="" type="checkbox"/>	In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).		

The 118-KW Horizontal Control Rod Tip Storage Cave was located in the K-Reactor area south of the Columbia River on the Hanford Site. It was located northeast of the 105-KW Reactor Building and was constructed as part of "Project X", a large Cold War expansion effort at Hanford. The purpose of the expansion program was to generate plutonium for explosive devices as part of the nuclear arsenal. Construction of the KW-Reactor and its associated facilities took place from 1952 until 1955. All facilities constructed during this project were designed for minimum damage and quick recovery from enemy attack. The permanent facility was designed to temporarily store irradiated and radioactively contaminated horizontal control rods that contained unknown quantities of radionuclides. It operated from 1955 until 1971.

It is therefore the conclusion of the U.S. Department of Energy that the 105-KW Horizontal Control Rod Tip Storage Cave is eligible for inclusion in the National Register of Historic Places under Criterion A as a contributing property within the Hanford Site Manhattan Project and Cold War Historic District.

Description of Physical Appearance

The construction of the concrete bunker shaped storage area was undertaken by pouring a concrete slab, burying pipe, adding doors, and covering the pipe with fill material. Initial construction of the structure began by pouring a concrete slab 60 feet long by 8 feet wide. Following the completion of the concrete slab, two sections of 24 inch pipe were cut in half lengthwise and laid open side down on the concrete slab. Winged concrete vertical walls and steel doors were added to each end of the pipes. The pipes were then covered with 6 feet of fill material forming a long tunnel. Berm width following the completion of the fill material was about 25 feet. Overall, the rod tip cave is about 70 feet long by 3 feet high by 6 feet wide with triangular shaped cement ends 7 feet high. The facility is entirely above ground and was used to store irradiated and radioactively contaminated horizontal control rods.

Major Bibliographic References

Westinghouse Hanford Company. 1994. *100-K Area Technical Baseline Report*. WHC-SD-EN-TI-239. Richland, Washington.

UNC Nuclear Industries. 1984. *100 Deactivated Area Pictorial Review*. UNI-2780. Richland, Washington.